

Title (en)
TORQUE DISTRIBUTION DEVICE, TORQUE DISTRIBUTION METHOD, TORQUE DISTRIBUTION VALUE GENERATION METHOD, AND PROGRAM

Title (de)
DREHMOMENTVERTEILUNGSVORRICHTUNG, DREHMOMENTVERTEILUNGSVERFAHREN, WERTGENERIERUNGSVERFAHREN FÜR DREHMOMENTVERTEILUNG UND PROGRAMM

Title (fr)
DISPOSITIF DE RÉPARTITION DE COUPLE, PROCÉDÉ DE RÉPARTITION DE COUPLE. PROCÉDÉ ET PROGRAMME DE GÉNÉRATION DE VALEUR DE DISTRIBUTION DE COUPLE

Publication
EP 2676830 A4 20160217 (EN)

Application
EP 11858516 A 20110218

Priority
JP 2011053565 W 20110218

Abstract (en)
[origin: EP2676830A1] A torque distribution apparatus (100) includes a instructed torque acquiring unit (101) that acquires instructed torque input; an efficiency map acquiring unit (105) that acquires a motor efficiency map (104) that corresponds to equipped motors; a vehicular speed detecting unit (102a) that detects vehicular speed of a vehicle; a drive wheel rotational speed detecting unit (102b) that detects drive wheel rotational speed of the drive wheels; a slip rate calculating unit (103) that based on the vehicular speed and the drive wheel rotational speed, calculates slip rate at the drive wheels; a calculating unit (106) that based on the slip rate, creates an efficiency variation expression that indicates efficiency values on a performance curve that indicates relations between the drive wheel rotational speed and torque, and calculates a torque that optimizes efficiency from the efficiency variation expression on the performance curve; a distributing unit (107) that based on the slip rate, the instructed torque and the torque optimizing efficiency, calculates a torque distribution value for each of the motors such that the total efficiency is maximized; and a control unit (108) that based on the calculated torque distribution values, controls torque distribution to each of the motors.

IPC 8 full level
B60L 9/18 (2006.01); **B60K 23/08** (2006.01); **B60L 3/10** (2006.01); **B60L 7/10** (2006.01); **B60L 15/20** (2006.01); **B60T 8/175** (2006.01); **B60W 10/08** (2006.01); **B60W 30/18** (2012.01)

CPC (source: EP US)
B60K 23/0808 (2013.01 - EP US); **B60L 3/108** (2013.01 - EP US); **B60L 7/10** (2013.01 - EP US); **B60L 15/20** (2013.01 - EP US); **B60L 15/2045** (2013.01 - EP US); **B60T 8/175** (2013.01 - EP US); **B60W 10/08** (2013.01 - EP US); **B60W 30/18** (2013.01 - EP US); **B60L 2220/42** (2013.01 - EP US); **B60L 2220/46** (2013.01 - EP US); **B60L 2240/463** (2013.01 - EP US); **B60W 2520/10** (2013.01 - EP US); **B60W 2520/26** (2013.01 - EP US); **B60W 2720/30** (2013.01 - EP); **B60W 2720/403** (2013.01 - EP US); **B60W 2720/406** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/7072** (2013.01 - EP); **Y02T 10/72** (2013.01 - EP US); **Y02T 10/84** (2013.01 - EP US)

Citation (search report)

- [ID] JP 2006345677 A 20061221 - DENSO CORP
- [A] EP 1752332 A2 20070214 - HITACHI LTD [JP]
- [A] EP 1533166 A2 20050525 - FUJI HEAVY IND LTD [JP]
- [A] US 2009051304 A1 20090226 - MUTA KOICHIRO [JP]
- [A] US 2004070270 A1 20040415 - GUNJI KENICHIRO [JP]
- [L] EP 2676831 A1 20131225 - PIONEER CORP [JP]
- See references of WO 2012111160A1

Cited by
US11639114B2; US2019023153A1; CN109532839A; CN109548401A; CN110843551A; EP2676831A4; EP3431326A1; WO2019016677A1; WO2016110313A1; US11872892B2; EP3823854B1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2676830 A1 20131225; EP 2676830 A4 20160217; JP 5096637 B1 20121212; JP WO2012111160 A1 20140703; US 2014018987 A1 20140116; US 9014897 B2 20150421; WO 2012111160 A1 20120823

DOCDB simple family (application)
EP 11858516 A 20110218; JP 2011053565 W 20110218; JP 2012502050 A 20110218; US 201114000019 A 20110218